

# SWBAT

identify direction of velocity and acceleration

Sep 4-7:31 AM

## Welcome!!!

SECA CP Physics  
Wednesday 11 November 2015



H. Leslie Grebe  
Room C-244

- Open to page 33 & 35 for check-off

Centering  
(animals)

Opening Activity:

What was the point of the video?

EXAMPLES UAM

5 VARIABLES  
4 EQUATION

PG 35  
→  $a$  IS CONSTANT

<http://www.buzzfeed.com/elainawahl/baby-animals-are-actual-sunshine#.ucg2PwNMP>



Sep 7-7:04 AM

## InterActive Notebook - Table of Contents

Unit		Chapters	Date
Left-Side Items	Page	Right-Side Items	Page
REFLECTION ON NOTES	2	TED ED ADAM SAVAGE	3
HOW FAR FROM BRIDGE	4	"FORT STUEBEN"	5
REFLECTION ON NOTES	6	HMWK: BASE UNITS	7
PR: DISTANCE & DISPLACEMENT	8	HMWK: FP DISPLACEMENT	9
DIAGRAM & STEPS	10	TIMING & ERROR	11
SUMMARY OF TIMING	12	HOW TO BUILD A TABLE	13
PR: CONVERTING SOLNS.	14	HMWK: FP CONVERSIONS	15
PR: VELOCITY & SPEED	16	HMWK: FP SPEED & VELOCITY	17
SPEED WORD PROBLEMS	18	ALGEBRA FOR PHYSICS	19
LAB JOURNAL 10/7	20	LAB JOURNAL 10/8	21
		HMWK: FP GRAPHS POSITION	23
LAB JOURNAL 10/12	24	EXPERIMENT RUBRIC	25
26	USE FOR PROJECT	27	
OBSERVATIONS OF CORK	28	FP: INTRO TO ACC.	29
REVIEW FOR TEST	30	BALL ON RAMP	31
VECTORS, DIRECTION	32	FP: BASIC ACC EXAMPLE	33
		FP: INTRO TO UAM	35

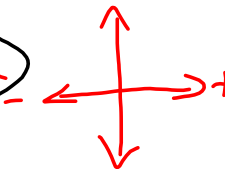
Sep 5-9:09 AM

Hmwk Pg 33 due Tuesday 11/10:

Flipping Physics: Basic Acceleration Example Problem

What was the point?

- DID AN EXAMPLE PROBLEM: FOUND
- 14.3 mph  $\oplus$  ENDED 23.7 mph  $\oplus$
- $\leftarrow V$  SPEEDING UP  $V \rightarrow +$
- $\leftarrow a$   $a \rightarrow +$
- $\leftarrow V$  SLOWING DOWN  $V \rightarrow +$
- +  $\rightarrow a$   $a \leftarrow -$



Hmwk Pg 35 due Wednesday 11/11

Flipping Physics: Introduction to Uniformly Accelerated Motion

Pg 31: Calculate acceleration!

$$\begin{aligned}
 V_1 = S_1 &= +41.7 \frac{\text{cm}}{\text{s}} \quad V_2 = S_2 = +51.3 \frac{\text{cm}}{\text{s}} \quad V_3 = S_3 = +63.3 \frac{\text{cm}}{\text{s}} \\
 a &= \frac{\Delta V}{\Delta t} = \frac{V_2 - V_1}{t_1} = \frac{+51.3 \frac{\text{cm}}{\text{s}} - +41.7 \frac{\text{cm}}{\text{s}}}{0.915} = \frac{9.6 \frac{\text{cm}}{\text{s}}}{0.915} = 10.5 \frac{\text{cm}}{\text{s}^2}
 \end{aligned}$$

Nov 9-8:19 AM

Direction of: L, R, 0 Pg 32

Scenario 1: Letting go of ball on left side

$V_{\text{initial}}$ : 0  $V_{\text{middle}}$ : R  $V_{\text{final}}$ : R

$a_{\text{initial}}$  (0)<sup>R</sup>  $a_{\text{middle}}$  R  $a_{\text{final}}$  R

DOES THE SPEEDOMETER GO R, L, 0 (0) SLOWING DOWN

Scenario 2: Rolling ball up track starting on the right

$V_i$  L  $V_m$  0  $V_f$  R  
 $a_i$  R  $a_m$  R  $a_f$  R

ACC CAN'T BE 0 IF V IS CHANGING  
 U.A.M.

Scenario 3: Throwing ball up into the air U, D, 0

$V_i$  ↑  $V_m$  0  $V_f$  ↓  
 U.A.M.  $a_i$  ↓  $a_m$  ↓  $a_f$  ↓

Create a scenario with a car:

Nov 10-8:07 AM

Pg 34 - Let's make-up a problem

Nov 11-8:03 AM